
U.S. EPA Proposes to Revise Title V Air Permit

Veolia Environmental Services Air Permit

Sauget, Illinois

January 2013

What can you do?

- **Submit written comments** to U.S. EPA regarding the draft permit during the comment period that runs for 45 days from [redacted] to [redacted]. Comments should include factual grounds and supporting material or references.
- **Attend the public hearing** on **Feb. 19, 2013**, at the Southern Illinois University Edwardsville – East St. Louis Higher Education Campus, 601 James R. Thompson Blvd., East St. Louis, Distance Learning Lab, Building B, Illinois, from 3 p.m. to 7 p.m. *See more details on the comment period and meeting on the back page.*
- **Go on a tour.** Veolia will be offering facility tours. To arrange a tour contact Doug Harris or Dennis Warchol at 618-271-2804.
- **Review the statement of basis and draft permit.** The *statement of basis* provides more information and explains the legal and factual basis for the permit conditions. The draft Title V permit includes all of the requirements the source is legally obligated to follow. Only portions of the permit that are being changed because of the proposed action are currently open for comment during the comment period. *See Page 3 for locations where you can view these documents.*

The U.S. Environmental Protection Agency is proposing to revise parts of a Clean Air Act permit for a controversial hazardous waste incinerator in Southern Illinois. U.S. EPA received and reviewed an application from Veolia Environmental Services, 7 Mobile Ave., Sauget, Illinois, near St. Louis, to modify its Clean Air Act Title V operating permit. The permit would add “feedrate” limits for certain heavy metals. Feedrate limits are the maximum amount of heavy metals Veolia can feed into the incinerator per hour. The heavy metals include mercury, arsenic and lead.

U.S. EPA determined the requested limits are unacceptable and proposes to revise the permit to incorporate more stringent feedrate limits. U.S. EPA experts say the lower limits are supported by available performance test data and comply with applicable regulations. Veolia is currently operating the incinerator and will not have to shut down because of this permitting action. The Agency will not issue a final permit until after the public has a chance to comment. See the left-hand box and read Page 3 for information about the public participation process for this proposed permit.

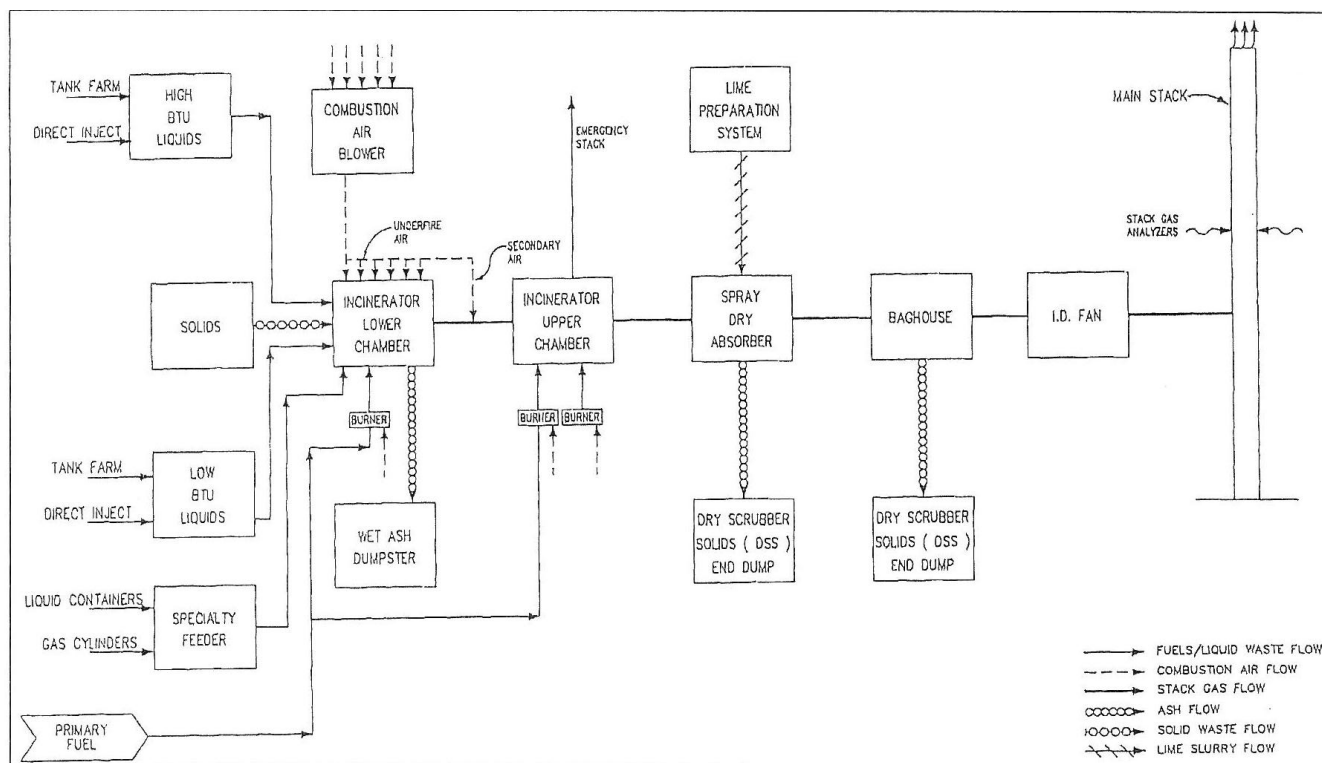
Background

The Clean Air Act requires sources that emit large amounts of air pollution to obtain an operating permit, also known as a Title V permit, after the source has begun to operate. This permit is designed to improve compliance by clarifying what facilities must do to control air pollution.

Typically, Illinois Environmental Protection Agency is responsible for issuing Title V permits in Illinois. However, in this case U.S. EPA is the permitting authority because of past court action. In 2005 environmental groups petitioned U.S. EPA to object to the issuance of a proposed Title V permit for Veolia. The federal Agency ordered Illinois to revise the permit within 90 days. Because the state did not do so in a timely manner, the Sierra Club and American Bottom Conservancy sued U.S. EPA, alleging it had a duty to issue the permit. The federal Agency issued the Title V permit to Veolia on Sept. 12, 2008. The permit required Veolia to submit a significant modification application to incorporate heavy metal feedrate limits. In March 2010, Veolia submitted its application to modify the permit. U.S. EPA is now proposing to deny the requested permit modifications because they do not meet Clean Air Act standards and at the same time proposing tougher feedrate limits.

Burning hazardous waste

Specially designed incinerators, boilers, and industrial furnaces can burn hazardous waste. Hazardous waste – which is toxic, flammable, corrosive or reacts with other materials – can be produced by businesses or manufacturing operations. Burning hazardous waste is one way to safely manage it. Burning reduces waste volume by converting solids and liquids to ash while destroying toxic organic compounds. In addition, disposal of the ash in a landfill is safer and more efficient than disposal of untreated hazardous waste. The ash generated from hazardous waste combustion



This diagram shows the combustion process of Unit 2. The combustion processes of Units 3 and 4 are slightly different, but follow similar principals.

must be tested, and, if found to be hazardous, must be treated for remaining toxicity before it is disposed of in a landfill.

Veolia has three hazardous waste combustors: #2, #3, and #4 (#1 was closed in 1992). Veolia receives hazardous waste in both liquid and solid forms. Liquid waste may be stored in a tank farm prior to being burned. The tanks release fugitive emissions, and carbon adsorption units are attached to each tank to help control these emissions. Bulk solid wastes are stored in four pits in a building prior to combustion. The building is maintained at negative pressure so emissions don't escape from the building. Before the waste is burned it is packaged into more manageable containers and any liquids are absorbed.

Each combustor has a primary and secondary combustion chamber that includes natural gas-fired auxiliary burners used during startup, shutdown, malfunctions and for additional heat input. The combustors are also connected to spray dryer absorbers and a baghouse, which help to control air pollution. Combustor #4 also has a tempering chamber and activated carbon injection to further help control air pollution. Emissions are constantly monitored for carbon monoxide and hydrogen chloride.

The combustors are supported by a lime handling system and an ash handling system. The lime handling system supports the spray dry absorber, as lime is an

important material in this air pollution control technology. The ash handling system ensures that ash produced during the combustion process is collected and properly disposed of.

Pollutants affected by the permit

The proposed permit action sets feedrate limits for mercury, semi-volatile metals such as cadmium and lead, and low-volatile metals such as arsenic, beryllium, and chromium. Volatility is a measure of how readily a substance changes from a solid or liquid to a vapor. These pollutants have known negative health effects. U.S. EPA is setting feedrate limits in this action that comply with applicable federal regulations. More detail about each of these pollutants can be found in the statement of basis. Information on how to review the statement of basis is found on the last page.

Setting the limits

Veolia established the heavy metal feedrate limits for which it applied by extrapolating the results of comprehensive performance tests performed in August and September 2008 to higher metal feedrates, as allowed by federal regulations. Veolia then requested U.S. EPA incorporate the extrapolated feedrates into the Title V permit. Veolia has requested feedrate limits that are three times higher than the performance test feedrates.

U.S. EPA experts do not believe extrapolation is appropriate for mercury because the requested limits

could result in violations of other applicable federal requirements and sufficient information was not provided to determine how the increased mercury feedrates would affect the operation of pollution control devices. Additionally, since wastes containing mercury were spiked during comprehensive performance testing (that is, a chemical compound containing mercury was intentionally added to the waste that was fed into the combustor), U.S. EPA staff believes the amount of mercury that was spiked plus the mercury already present in the waste is sufficient to set the feedrate limit without extrapolation. Therefore, U.S. EPA is proposing to deny Veolia's application to modify its Title V permit, and incorporate into Veolia's Title V permit as mercury feedrate limits the feedrates at which Veolia conducted its 2008 testing.

The federal Agency is also proposing to deny the higher semi-volatile and low-volatile metal feedrates requested by Veolia and at the same time incorporate tougher limits into the permit. The limits Veolia requested were more than twice the reported historical feedrates.

Because of the denial of the application, U.S. EPA is issuing a Notice of Intent to Deny, known as a NOID, to Veolia in addition to proposing revisions to the Title V permit.

Monitoring

In the proposed revisions to the Title V permit, Veolia will be required to install and operate a multi-metals continuous emissions monitoring system (CEMS) on the largest incinerator (Unit #4) for at least one year. A multi-metals CEMS tests the air emitted during the incineration process to determine the amount of mercury, semi-volatile metals and low-volatile metals in the air, and reports the results approximately once every fifteen minutes. The test results will help U.S. EPA ensure the feedrate limits are adequate to protect air quality. After a year of running the CEMS, U.S. EPA staff believes it will have enough information to determine if the feedrate limits are appropriate and Veolia will then no longer be required to use the multi-metals CEMS.

Public participation

You can participate in the decision-making process on the permit by submitting statements during the public comment period **XXX to XXXX** or at the public hearing Feb. 19 in East St. Louis (*see front page box*).

All written comments must be postmarked or emailed

no later than **XXXX**. All comments received within the public comment period will be considered before U.S. EPA makes a final decision on the proposed action. Your comments should include your name and address and all reasonable references, factual grounds, and supporting material. Be sure to include your name and address if you would like to receive notification of U.S. EPA's final decision regarding the permit and its responses to comments submitted during the public comment period.

Comments can be submitted:

- Via the Internet at the www.regulations.gov/ website at Docket ID No. U.S. EPA-R05-OAR-2012-0649 or at www.epa.gov/region5/newsevents/ and look in the "public comment" section.
- Mail to **George Czerniak**, U.S. EPA, 77 W. Jackson Blvd. (A-18J), Chicago, IL 60604.
- Email to **David Ogulei** at ogulei.david@epa.gov.

At the **Feb. 19** public hearing you will be invited to present any comments or concerns you have about the proposed changes. The federal Agency is required to consider all comments and respond to all relevant comments. A signup sheet will be available at the public hearing for those who are interested in presenting oral testimony and spots will be available to present on a first-come/first-serve basis.

Each speaker will be limited to 5 to 10 minutes depending on the number of presenters. The U.S. EPA representative may ask clarifying questions during the oral presentations but will not respond to the comments at that time. If you require translation services or special accommodations for the public hearing contact U.S. EPA's David Ogulei at ogulei.david@epa.gov.

View the documents

The actual draft permit and another document called a *statement of basis* that provides information from which the decision was made can be reviewed at:

- The www.regulations.gov/ website at Docket ID No. U.S. EPA-R05-OAR-2012-0649 or at www.epa.gov/region5/newsevents/ and look in the "public comment" section.
- **Central Express Library**, Suite 160, 815 Olive St, St. Louis, MO 63101.
- **East St Louis Library**, 5300 State St., East St Louis, IL 62203.
- **Cahokia Public Library**, 140 Cahokia Park Drive, East St Louis, IL 62206